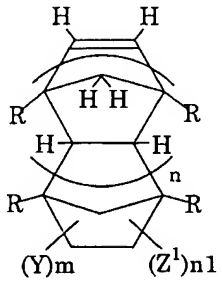
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

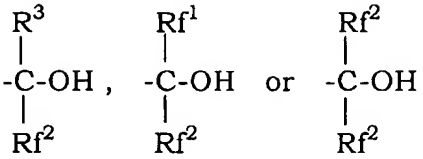
2. (original): A process for preparing a fluorine-containing norbornene derivative having a fluorine-containing tertiary alcohol structure which is represented by the formula (4):



wherein Z^1 is the same or different and each is:

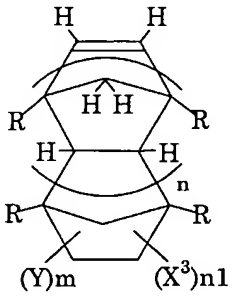
$$-(R^1)_{n2}-Z^2$$

in which Z^2 is:



wherein Rf^1 is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond, Rf^2 is a fluorine-

containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond, R^3 is H or a hydrocarbon group having 1 to 10 carbon atoms, R^1 is a divalent organic group, n2 is 0 or 1; Y is the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5; m is an integer of from 1 to 5; n1 is an integer of from 1 to 5; m + n1 = 6, said process being characterized by reacting a norbornene derivative represented by the formula (3):



wherein X^3 is the same or different and each is:

$$-(R^1)_{n2}-X^4$$

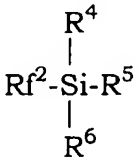
in which X^4 is $-COOR^2$,

$$-\overset{X^5}{\underset{|}{C}}=O, \quad -\overset{R^3}{\underset{|}{C}}=O \quad \text{or} \quad -\overset{Rf^1}{\underset{|}{C}}=O$$

wherein R^2 is an alkyl group having 1 to 5 carbon atoms, X^5 is halogen atom; R^3, Rf^1, R^1, Y, R, m, n, n1 and n2 are as defined above, with a fluoroalkylation agent which introduces Rf^2 to X^4.

3. (canceled).

4. (original): The preparation process of Claim 2, wherein the fluoroalkylation agent is a fluorosilane compound represented by:



wherein Rf^2 is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond; R^4, R^5 and R^6 are the same or different and each is a hydrocarbon group having 1 to 10 carbon atoms.

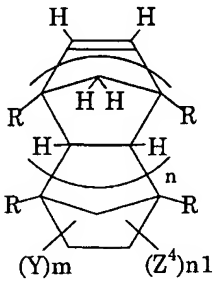
5. (canceled).

6. (canceled).

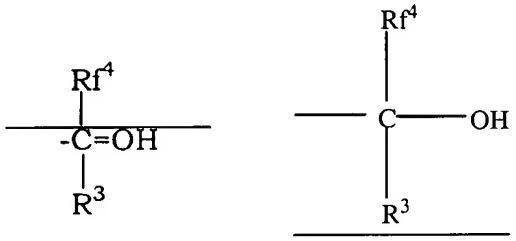
7. (canceled).

8. (canceled).

9. (currently amended): A norbornene derivative having a fluorine-containing alcohol structure represented by the formula (8):

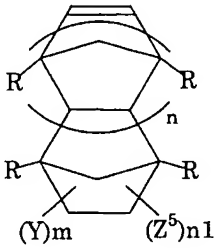


wherein Z^4 is the same or different and each is:

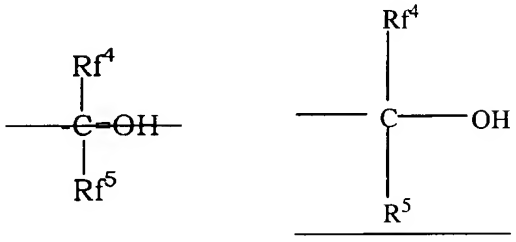


in which Rf^4 is the same or different and each is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond, R^3 is H or a hydrocarbon group having 1 to 10 carbon atoms; Y is the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5; m is an integer of from 1 to 5; n1 is an integer of from 1 to 5; m + n1 = 6.

10. (currently amended): A norbornene derivative having a fluorine-containing alcohol structure represented by the formula (9):

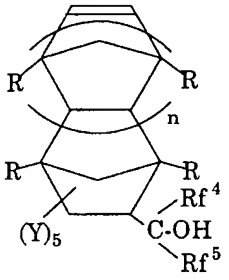


wherein Z^5 is the same or different and each is:



in which Rf^4 and Rf^5 are the same or different and each is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond; Y is the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5; m is an integer of from 1 to 5; n1 is an integer of from 1 to 5; m + n1 = 6.

11. (original): A norbornene derivative having a fluorine-containing alcohol structure represented by the formula (10):

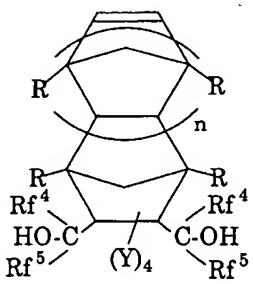


wherein Rf^4 and Rf^5 are the same or different and each is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond; Y is the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5.

12. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 10, wherein in the formula (9), at least one of the substituents Y is F or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond.

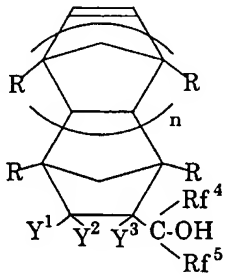
13. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 11, wherein in the formula (10), at least one of the substituents Y is F or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond.

14. (original): A norbornene derivative having a fluorine-containing alcohol structure represented by the formula (11):



wherein Rf^4 and Rf^5 are the same or different and each is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond; Y is the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5.

15. (original): A norbornene derivative having a fluorine-containing alcohol structure represented by the formula (12):



wherein Rf^4 and Rf^5 are the same or different and each is a fluorine-containing alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and ether bond; Y^1, Y^2 and Y^3 are the same or different and each is H, F, Cl, an alkyl group having 1 to 10 carbon atoms or a fluorine-containing alkyl group which has 1 to 10 carbon atoms

and may have ether bond; R is the same or different and each is H or an alkyl group having 1 to 10 carbon atoms; n is 0 or an integer of from 1 to 5; at least one of Y^1, Y^2 and Y^3 is F or a fluorine-containing alkyl group which has 1 to 10 carbon atoms and may have ether bond.

16. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 15, wherein in the formula (12), Y^1 and Y^2 are H and Y^3 is F or CF_3.

17. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 15, wherein in the formula (12), Y^1 and Y^2 are F and Y^3 is F or CF_3.

18. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 9, wherein Rf^4 and Rf^5 are CF_3.

19. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 10, wherein Rf^4 and Rf^5 are CF_3.

20. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 11, wherein Rf^4 and Rf^5 are CF_3.

21. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 14, wherein Rf^4 and Rf^5 are CF_3.

22. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 15, wherein Rf^4 and Rf^5 are CF_3.

23. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 9 which has a protective acid-reactive functional group $-OQ^1$ protecting hydroxyl.

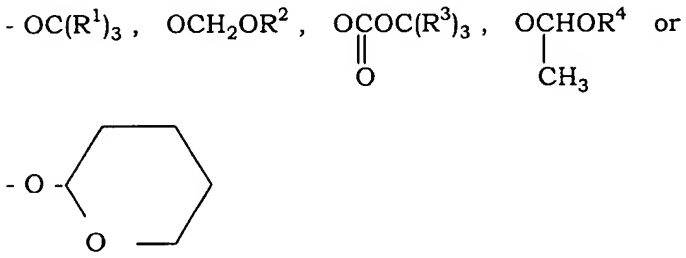
24. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 10 which has a protective acid-reactive functional group $-OQ^1$ protecting hydroxyl.

25. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 11 which has a protective acid-reactive functional group $-OQ^1$ protecting hydroxyl.

26. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 14 which has a protective acid-reactive functional group $-OQ^1$ protecting hydroxyl.

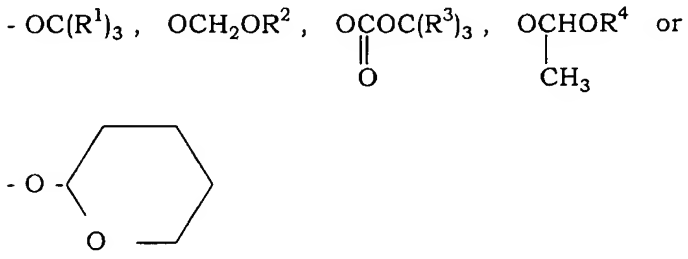
27. (original): The norbornene derivative having a fluorine-containing alcohol structure of Claim 15 which has a protective acid-reactive functional group $-OQ^1$ protecting hydroxyl.

28. (original): The norbornene derivative of Claim 23, wherein the protective acid-reactive functional group $-OQ^1$ is at least one selected from the group consisting of:



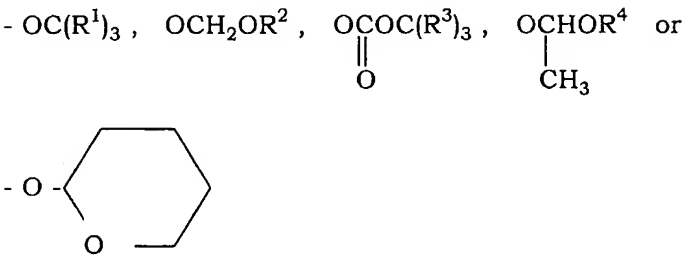
wherein R^1, R^2, R^3 and R^4 are alkyl groups having 1 to 5 carbon atoms.

29. (original): The norbornene derivative of Claim 24, wherein the protective acid-reactive functional group $-OQ^1$ is at least one selected from the group consisting of:



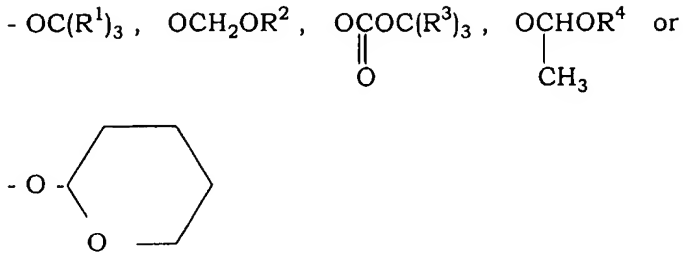
wherein R^1, R^2, R^3 and R^4 are alkyl groups having 1 to 5 carbon atoms.

30. (original): The norbornene derivative of Claim 25, wherein the protective acid-reactive functional group $-OQ^1$ is at least one selected from the group consisting of:



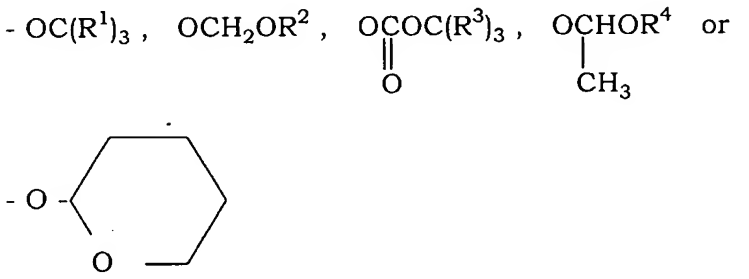
wherein R^1, R^2, R^3 and R^4 are alkyl groups having 1 to 5 carbon atoms.

31. (original): The norbornene derivative of Claim 26, wherein the protective acid-reactive functional group $-OQ^1$ is at least one selected from the group consisting of:



wherein R^1, R^2, R^3 and R^4 are alkyl groups having 1 to 5 carbon atoms.

32. (original): The norbornene derivative of Claim 27, wherein the protective acid-reactive functional group $-OQ^1$ is at at least one selected from the group consisting of:



wherein R^1, R^2, R^3 and R^4 are alkyl groups having 1 to 5 carbon atoms.

33.-62. (canceled).